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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,263	10/26/1999	RICHARD HANS HARVEY	Q56191	2940

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EXAMINER

ALAM, HOSAIN T

ART UNIT PAPER NUMBER

2172

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/427,263

Applicant(s)

HARVEY, RICHARD HANS

Examiner

Hosain T Alam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 6-11, 13-30, 36-40, 42-55 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12, 31-35, 41, 56-58, 60 and 61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### ***Response to Applicant's Request for Reconsideration of Election/Restrictions Requirements***

Applicant's election with traverse of claims 1-5, 12, 31-35, 41, 56-58, 60, and 61 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that claim 6 of Group II is dependent from claim 2 of Group I, claims 13-26 in Group II depend from claim 12 of Group I, and further that claim 36 of Group II depends from claim 31 of Group I. This is not found persuasive for the reasons set forth hereinbelow (Please see the highlighted sections):

With reference to "**Related Inventions**", MPEP 808.02 states:

Where, as disclosed in the application, the several inventions claimed are related, and such related inventions are not patentably distinct as claimed, restriction under 35 U.S.C. 121 is never proper (MPEP § 806.05). If applicant optionally restricts, double patenting may be held. **Where the related inventions as claimed are shown to be distinct under the criteria of MPEP § 806.05(c) - § 806.05(i), the examiner, in order to establish reasons for insisting upon restriction, must show by appropriate explanation** one of the following:

(A) Separate classification thereof : This shows that each distinct subject has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search. Patents need not be cited to show separate classification.

(B) A separate status in the art when they are classifiable together :Even though they are classified together, each subject can be shown to have formed a separate subject for inventive effort when an explanation indicates a recognition of separate inventive effort by inventors. Separate status in the art may be shown by citing patents which are evidence of such separate status, and also of a separate field of search.

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(C) A different field of search : Where it is necessary to search for one of the distinct subjects in places where no pertinent art to the other subject exists, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of subject matter covered by the claims. Patents need not be cited to show different fields of search. Where, however, the classification is the same and the field of search is the same and there is no clear indication of separate future classification and field of search, no reasons exist for dividing among related inventions

The examiner has fulfilled his duties by providing appropriate explanation as to how the related inventions of Groups I through III are distinct under the criteria of MPEP § 806.05(c) - § 806.05(i). Please see the highlighted sections:

*Restriction to one of the following inventions is required under 35 U.S.C. 121:*

- I. Claims 1-5, 12, 31-35, 41, 56, 57, 58, 60-61, drawn to a method of storing data in a database in normalized form and in raw form, classified in class 707, subclass 3.
- II. Claims 6, 7-11, 27-29, 30, 36-40, 59 drawn to a method of storing data in a database for use in a directory service system, classified in class 707, subclass 10
- III. Claims 13-26, 42-55, drawn to a method of storing and/or searching data in a database using specific structure, classified in class 707, subclass 4.

*The inventions are distinct, each from the other because of the following reasons:*

*Inventions in Groups I through III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because inventions in*

*Group I and III can be used for any database. The subcombination has separate utility such as storing and retrieving data in directory service system. The invention n in Group III has **separate utility as such accessing a database through SQL or through an object-relational mapping.***

*Inventions in Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention in Group II has **separate utility such as in a directory service.** See MPEP § 806.05(d).*

*Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.*

*Because these inventions are distinct for the reasons given above and the search required for any of the Groups I through III is not required for Group another group, restriction for examination purposes as indicated is proper.*

In response, the applicant has indicated that claim 6 of Group II is dependent from claim 2 of Group I, claims 13-26 in Group II depend from claim 12 of Group I, and further that claim 36 of Group II depends from claim 31 of Group I.

The applicant has only shown the dependency of claims and has not provided any reasons as to why the inventions are not distinct.

It is possible for an applicant to draft a plurality of dependent claims and make them dependent from a single independent claim. However, when the dependent claims encompass multiple areas of the U. S. Patent Classification system, it imposes additional burden on the examiner as such she or he has to conduct search in additional areas. MPEP 808.02 is intended to address this scenario.

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Besides that requiring an examiner does not seem to be in conformance with two well known Patent Goals outlined in the recently published Strategic Plan of the U. S. Patent and Trademark Office, available to the general public at [www.uspto.gov](http://www.uspto.gov). The purpose of these goals is an efficient and streamlined patent process to reduce the cycle time and improve the quality of a patent issue. The common sense is also that searching in limited and appropriate areas would turn out a prior art reference faster and thus help close the prosecution of a case earlier.

So in view of the above mentioned MPEP sections and in the spirit of fulfilling stated Patent Goals, the examiner respectfully submits that, the requirement is still deemed proper.

#### **Status of the Claims**

Claims 1-5, 12, 31-35, 41, 56-58, 60, and 61 are pending in this Office Action. Claims 6-11, 13-30, 36-40, 42-55, and 59 are withdrawn from consideration as being directed to non-elected invention.

The scope of claim 56 is currently unclear and a 35 USC 112, 2<sup>nd</sup> paragraph rejection has been applied. If the applicant amends claim 56 as such it is clearly directed to a directory service, then the examiner suggests that claim 56 be included in Group II which is directed to directory service.

***Information Disclosure Statement***

The information disclosure statements (IDS) filed in Paper NO. 2 and 3 have been considered. Some of the references in the IDS, Paper No. 2, filed October 26, 1999) fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the references do not exist in the application file. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-5, 12, 31-35, 41, 56-58, 60 and 61 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,052,681 issued to Harvey. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "protocol encoded form" and "syntax-normalized form" as recited in claim 8 are the same as the "raw form" and "normalized form" as claimed. A person of ordinary skill in the art would be able to infer it by using the specification of the U.S. Patent No. 6,052,681 as dictionary.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 56 and 61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 recites a directory service in the preamble and in the body of the claim means for finding data and means for transferring data out of a database are included. The "means for finding data" is unclear as whether it is intended to means for transferring data into or not. In addition, a proper nexus between the "directory service" as recited in the preamble and the means for "finding" and "transferring" has not been established. If the means for transferring can perform the function of transferring the data into and out of the database, it is unclear as what the means for finding is intended.



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Claim 61 does not provide any scope nor does it provide any limitation that can be searched. Due to uncertainties of claim 61, no art has been applied thereto, see *In re Steele*, 305 F.2d859 134 USPQ 292 (CCPA 1962). The examiner will not speculate as to the intended meaning.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 12, 31-35, 41, 56-58, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by the publication, "An Object-Oriented Approach to Directory Systems," by C.M.R. Leung, IEEE Region 10 Conference on Computer and Communications Systems, September, 1990, Hong Kong, pages 736-740, hereinafter, "Leung."

#### **Leung teaches:**

As claim 1, a method of storing data in a database as claimed comprising the steps of obtaining both a raw form of data to be stored and a normalized form of said data; and storing both the normalized form and raw form of said data (Page 738, col. 2, Figure 6).

As to claim 2, first obtaining the a raw form of data; and then generating a normalized form of data (page 738, col. 2).

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As to claim 3, maintaining both the normalized and raw form of data for database searching and data retrieval (page 738, col. 2, the 1<sup>st</sup> paragraph).

As to claim 4, maintaining both the normalized and raw form of data for database searching and data in a table (Figure 6 of page 738, col. 2, shows tables).

As to claim 5, correlating the storage location of said raw form and said normalized form in the table (Figure 6 of page 738, col. 2, shows tables).

As to claim 12, a method of locating data in a database wherein the data is stored linked to a normalized form of the data and comprising the step of locating said data by searching on said normalized form of the data (page 738, col. 2, Figure 6).

Claims 31-35 are essentially the same as claims 1-5 except that they set forth the claimed invention as an apparatus rather than a method and rejected for the same reasons as applied above.

Claims 41 is essentially the same as claim 12 except it sets forth the claimed invention as an apparatus rather than a method and rejected for the same reasons as applied above.

**Leung further teaches:**

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As to claim 56, an apparatus for transferring data in and out of a database for a directory service system wherein the data is stored in raw form and in normalized form as claimed comprising means for finding data in the database using a normalized form; and means for transferring data out of the database using a raw form (Page 738, col. 2, Figure 6).

Claims 57 is essentially the same as claim 1 except it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied above.

As to claims 58 and 60 which further limit the raw form as being ASN.1 formats, see Leung, page 736, col. 1 and 2, Sections, "Introduction" and "Directory Systems" that detail various directory services standards.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosain T Alam whose telephone number is (703) 308-6662. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-6606 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305 3800.

The following contact numbers may also be used:

TC 2100 After Finals number is 703-746-7238

TC 2100 Official Fax number is 703-746-7239

TC 2100 Customer Service Center is 703-746-7240



Hosain T Alam  
Primary Examiner  
Art Unit 2172

September 2, 2002